IN THE CLAIMS

Please amend the claims as follows:

1. (original) A tuning system for receiving a radio frequency input signal included in a frequency range the range having a plurality of non-overlapping bands, a maximum frequency and a minimum frequency, the tuning system comprising a voltage-controlled oscillator controlled by an analog signal and a first binary signal and being characterized in that the analog signal is inputted to a window comparator, said comparator having a low threshold which is indicative for the minimum frequency and a high threshold which is indicative for the maximum frequency.

2. (original) A tuning system as claimed in claim 1, wherein the window comparator generates a signal that is inputted to a controller, for generating the first binary signal to digitally control an output frequency of the voltage-controlled oscillator.

3. (original) A tuning system as claimed in claim 2, wherein the controller further generates a second binary signal that is inputted to a frequency divider for determining a division factor of a periodical signal generated by the voltage-controlled oscillator.

4. (currently amended) A tuning system as claimed in ~~claims 2 or 3~~claim 2, wherein the controller further comprises a local memory for storing a binary representation of the frequency range and of each of the bands included in the frequency range.

5. (currently amended) A tuning system as claimed in ~~claims 3 or 4~~claim 3 further comprising a phase - locked loop, the phase - locked loop including a phase detector coupled to the frequency divider, the phase detector generating an error signal that is proportional to a phase difference between a phase of a reference periodical signal and a phase of a signal generated by the frequency divider, the error signal being inputted to a compound bloc comprising a charge pump coupled to a loop filter, the compound bloc generating the analog signal.

6. (original) A tuning system as claim in claim 1, wherein the window comparator comprises a first differential comparator and a second differential comparator, the first differential comparator generating a first signal having a first binary value whenever the analog signal is bigger than the high threshold, the second differential comparator generating a second signal having a second

binary value whenever the analog signal is smaller that the low threshold.

7. (original) A tuning system as claimed in claim 1, wherein the voltage-controlled oscillator comprises a plurality of capacitors coupled respectively to a plurality of switches, a state of said switches being controlled by the first digital signal.

8. (original) A tuning system as claimed in claim 3, wherein the window comparator comprises a first differential comparator and a second differential comparator, the first differential comparator generating a first signal having a first binary value whenever the analog signal is larger than the high threshold, the second differential comparator generating a second signal having a second binary value whenever the analog signal is smaller that the low threshold, wherein the voltage-controlled oscillator comprises a plurality of capacitors coupled respectively to a plurality of switches, a state of said switches being controlled by the first digital signal and the first digital signal comprises a plurality of binary signals each of the binary signals controlling a respective switch, a tuning method further comprising steps of:

1. Setting all the switches in an OFF state so that the first digital signal = 00… 0;

2. Modifying the second binary signal sequentially until the first signal is HIGH;

3. Setting all the switches in an ON state so that the first digital signal = 11... 1;

4. Modifying the second binary signal sequentially until the second signal is HIGH;

5. Setting the first binary signal = 00... 1;

6. Adjusting the second binary signal till the first signal becomes HIGH;

7. Adjusting the second binary signal till the second signal becomes HIGH;

8. Storing the second binary signal codes in memory of the controller;

9. Modifying the first binary signal to the next value; and

10. Repeating steps 6 to 9 until all possible values of the first digital signal are used.

9. (original) Use of the tuning method claimed in claim 8 for quality control of the tuning systems having a VCO controlled by an analog signal and a binary signal in a manufacturing process and for quick locking on a frequency of an external signal in an exploitation process.